CLAIM AMENDMENTS

1 1. (Previously Presented) A method for retrieving information from one or more data

2   sources, the method including the steps of:

3   receiving, from a particular type of client, a request for a service;

4   wherein said request for said service is received at a system located separately from

5   said client;

6   wherein said request is sent by a particular user;

7   within said system generating, based on a first set of parameters, a request object;

8   wherein said first set of parameters includes identity of said service;

9   based on said request object, said system transmitting requests to one or more data

10   sources;

11   at said system receiving responses to said requests from said one or more data sources

12   in one or more formats other than a particular format;

13   at said system converting said responses into said particular format;

14   at said system generating, based on said responses, a composite response document in

15   said particular format;

16   at said system transforming said composite response document into a client-formatted

17   response based on a second set of parameters;

18   wherein said second set of parameters includes identity of said particular type of

19   client; and

20   at said system transmitting said client-formatted response to said particular user.

1 2. (Original) The method of Claim 1 further comprising the steps of

2   embedding within said request object one or more filtering criteria, and

3   filtering data from said composite response document based on said filtering criteria

4   prior to transforming said composite response document.

1 3. (Original) The method of Claim 2 wherein

2 one of said requests invokes a search mechanism at a data source based on a first set

3 of search criteria; and

4 the step of filtering data includes filtering data that originated from said data source

5 based on a second set of search criteria.

1 4. (Original) The method of Claim 1 wherein said first set of parameters for generating

2 said request object includes identity of said particular user.

1 5. (Original) The method of Claim 1 wherein:

2 the step of generating the request object includes generating filtering criteria; and

3 the method includes filtering data from the composite response document based on

4 the filtering criteria before transforming the composite response document.

1 6. (Original) The method of Claim 1 wherein:

2 the step of receiving responses to said requests from said one or more data sources in

3 one or more formats other than a particular format involves receiving

4 responses to said requests from said one or more data sources in one or more

5 formats other than XML;

6 the step of converting said responses into said particular format involves converting

7 responses into XML;

8 the step of generating a composite response document in said particular format

9 involves generating a composite response document in XML; and

10 the step of transforming said composite response document into a client-formatted

11 response involves transforming said composite response document into a

12 format other than XML.

1 7. (Original) The method of Claim 6 wherein the step of transforming includes:

2 identifying one or more XSL stylesheets based on said second set of parameters; and

3 applying said one or more XSL stylesheets to said composite response document.

1 8. (Original) The method of Claim 1 wherein:

2 said one or more data sources include

3   a first data source that supports a first protocol and is accessible through a first

4   gateway, and

5   a second data source that supports a second protocol and is accessible through

6   a second gateway; and

7 the step of converting said responses into said particular format includes

8   said first gateway converting a response from said first data source to said

9   particular format; and

10   said second gateway converting a response from said second data source to

11   said particular format.

1 9. (Original) The method of Claim 8 wherein at least one of said first data source and

2 said second data source is a database system.

1 10. (Original) The method of Claim 8 wherein at least one of said first data source and

2 said second data source is an HTTP server.

1 11. (Original) The method of Claim 10 wherein the client-formatted response is an

2 HTML document.

1 12. (Original) The method of Claim 6 wherein:

2 the step of generating a request object involves generating an XML request document

3   that includes unresolved links; and

4 the step of transmitting requests involves resolving said unresolved links.

1   13.   (Original) The method of Claim 12 wherein the step of generating said composite

2   response document involves replacing said unresolved links in said XML request

3   document with XML data generated based on said responses from said one or more

4   data sources.

1   14.   (Original) The method of Claim 1 wherein said particular type of client is a mobile

2   phone.

1   15.   (Original) The method of Claim 1 wherein:

2   the method further comprises the steps of

3   receiving data that indicates user-specific customizations to services;

4   storing said data in a configuration database;

5   searching said configuration database for said user-specific customizations in

6   response to receiving said request for said service;

7   said first set of parameters used to generate said request object includes said user-

8   specific customizations.

1   16.   (Original) The method of Claim 1 wherein:

2   said one or more data sources include

3   a first web site accessible through a gateway, and

4   a second web site accessible through said gateway; and

5   the step of converting said responses into said particular format includes

6   said gateway converting a first response from said first web site to said

7   particular format; and

8   said gateway converting a second response from said second web site to said

9   particular format.

1   17.   (Previously Presented) A system for transferring information between devices, the

2   system comprising:

3   a request preprocessor, which is located separately from clients, configured to

4   receive service requests from said clients,

5   generate request objects for said service requests, and

6   pass said request objects to a request processor, which is located separately

7   from said clients;

8   said request processor operatively coupled to said request preprocessor and to one or

9   more gateways, said request processor being configured to respond to said

10   request objects by transmitting requests to data sources through said one or

11   more gateways;

12   said one or more gateways operatively coupled between said request processor and

13   said data sources, said one or more gateways being configured to

14   translate between a particular format and one or more other formats,

15   convert said requests to said one or more other formats prior to issuing said

16   requests to said data sources,

17   convert responses from said data sources to said particular format, and

18   pass said responses in said particular format to said request processor;

19   wherein said request processor is further configured to generate composite response

20   documents in said particular format based on said responses, and to pass said

21   composite response documents to a post processor;

22   said post processor operatively coupled to said request processor, said post processor

23   being configured to

24   transform said composite response documents from said particular format to

25   client-specific responses having formats required by clients, and

26   transmit said client-specific response documents to said clients.

1   18.   (Original) The system of Claim 17 wherein said particular format is XML.

1   19.   (Original) The system of Claim 18 wherein the request objects are XML documents.

1   20.   (Original) The system of Claim 18 wherein the post processor includes an XSL

2   engine that transforms said composite response documents by

3   selecting one or more XSL stylesheets based on a first set of parameters, said first set

4   of parameters including type of the clients; and

5   applying said one or more XSL stylesheets.

1   21.   (Original) The system of Claim 17 wherein the pre-processor generates the request

2   objects based on a particular set of parameters, said particular set of parameters

3   including identity of users that submit said service requests.

1   22.   (Previously Presented) A computer-readable medium bearing instructions for

2   retrieving information from one or more data sources, the computer-readable medium

3   including instructions for performing the steps of:

4   receiving, from a particular type of client, a request for a service;

5   wherein said request for said service is received at a system located separately from

6   said client;

7   wherein said request is sent by a particular user;

8   within said system generating, based on a first set of parameters, a request object;

9   wherein said first set of parameters includes identity of said service;

10   based on the request object, said system transmitting requests to one or more data

11   sources;

12   at said system receiving responses to said requests from said one or more data sources

13   in one or more formats other than a particular format;

14   at said system converting said responses into said particular format;

15   at said system generating, based on said responses, a composite response document in

16   said particular format;

17   at said system transforming said composite response document into a client-formatted

18   response based on a second set of parameters;

19   wherein said second set of parameters includes identity of said particular type of

20   client; and

21   at said system transmitting said client-formatted response to said particular user.

1   23.   (Original) The computer-readable medium of Claim 22 wherein said first set of

2   parameters for generating said request object includes identity of said particular user.

1   24.   (Original) The computer-readable medium of Claim 22 wherein:

2   the step of generating the request object includes generating filtering criteria;

3   the computer-readable medium includes instructions for filtering data from the

4   composite response document based on the filtering criteria before

5   transforming the composite response document.

1   25.   (Original) The computer-readable medium of Claim 22 wherein:

2   the step of receiving responses to said requests from said one or more data sources in

3   one or more formats other than a particular format involves receiving

4   responses to said requests from said one or more data sources in one or more

5   formats other than XML;

6   the step of converting said responses into said particular format involves converting

7   responses into XML;

8   the step of generating a composite response document in said particular format

9   involves generating a composite response document in XML; and

10   the step of transforming said composite response document into a client-formatted

11   response involves transforming said composite response document into a

12   format other than XML.

1   26.   (Original) The computer-readable medium of Claim 25 wherein the step of

2   transforming includes:

3   identifying one or more XSL stylesheets based on said second set of parameters; and

4   applying said one or more XSL stylesheets to said composite response document.

1   27.   (Original) The computer-readable medium of Claim 22 wherein:

2   said one or more data sources include

3   a first data source that supports a first protocol and is accessible through a first

4   gateway, and

5   a second data source that supports a second protocol and is accessible through

6   a second gateway; and

7   the step of converting said responses into said particular format includes

8   said first gateway converting a response from said first data source to said

9   particular format; and

10   said second gateway converting a response from said second data source to

11   said particular format.

1   28.   (Original) The computer-readable medium of Claim 27 wherein at least one of said

2   first data source and said second data source is a database system.

1   29.   (Original) The computer-readable medium of Claim 27 wherein at least one of said

2   first data source and said second data source is an HTTP server.

1   30.   (Original) The computer-readable medium of Claim 29 wherein the client-formatted

2   response is an HTML document.

1 31. (Original) The computer-readable medium of Claim 25 wherein:

2   the step of generating a request object involves generating an XML request document

3   that includes unresolved links; and

4   the step of transmitting requests involves resolving said unresolved links.

1 32. (Original) The computer-readable medium of Claim 31 wherein the step of generating

2   said composite response document involves replacing said unresolved links in said

3   XML request document with XML data generated based on said responses from said

4   one or more data sources.

1 33. (Original) The computer-readable medium of Claim 22 wherein said particular type

2   of client is a mobile phone.

1 34. (Original) The computer-readable medium of Claim 22 wherein:

2   the computer-readable medium further comprises instructions for performing the

3   steps of

4   receiving data that indicates user-specific customizations to services;

5   storing said data in a configuration database;

6   searching said configuration database for said user-specific customizations in

7   response to receiving said request for said service;

8   said first set of parameters used to generate said request object includes said user-

9   specific customizations.

1 35. (Original) The computer-readable medium of Claim 22 wherein:

2   said one or more data sources include

3   a first web site accessible through a gateway, and

4   a second web site accessible through said gateway; and

5   the step of converting said responses into said particular format includes

6   said gateway converting a first response from said first web site to said

7   particular format; and

8   said gateway converting a second response from said second web site to said

9   particular format.

1   36.   (New) The method of Claim 1 wherein:

2   said one or more data sources include a plurality of data sources; and

3   said composite response document reflects information from each of said plurality of

4   data sources.

1   37.   (New) The computer-readable medium of Claim 22 wherein:

2   said one or more data sources include a plurality of data sources; and

3   said composite response document reflects information from each of said plurality of

4   data sources.